

3. PHASE I FIELDWORK NARRATIVE

The Phase I fieldwork program implemented a systematic program of exploration across the site.

Fieldwork began December 12, 2000, with a field reconnaissance, and excavations beginning the following day. The assessment was conducted by Edward Heite, Cara Blume, and Inez Reed Hoffman. At that time, a route close to the apartment complex was anticipated.

Generally it was decided that the most likely prehistoric site locations are beyond the west perimeter of the Cedar Chase Apartments complex, in a state-owned wooded area. Within this wooded area, one might expect prehistoric sites on the high sandy bluffs

overlooking White Marsh Branch. An apparent old fence line (Figure 16), with a parallel line of trees, marks the boundary of the former trailer park property. This fence line appears to coincide with the west boundary of the former Heatherwood tract conveyed to DelTech in 1987 (Figure 12). Beyond the fence line, in the woods, the ground falls off toward wetlands of White Marsh Branch.

The first proposed right-of-way (below) would have crossed the landscaped grounds of the apartment complex, but the most likely resource

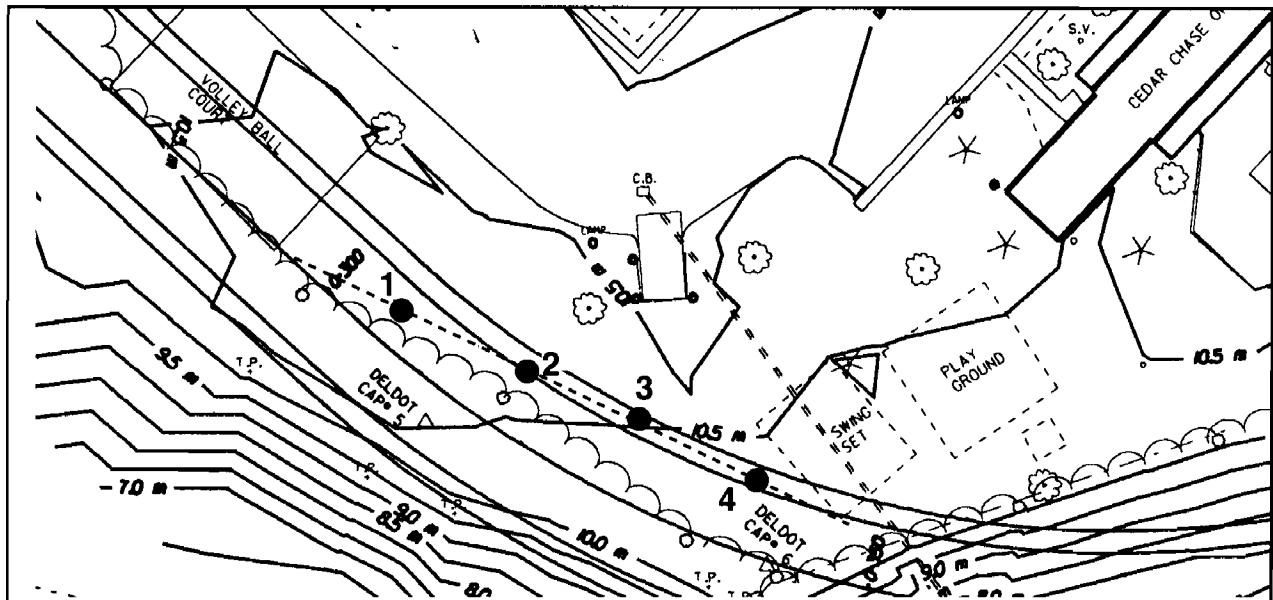


FIGURE 13: The first four tests were sunk along a line between two recreational structures, a volleyball court and a swingset, in the Cedar Chase Apartment complex. Along the line, about 50 meters, a prevailing pattern of disturbance was apparent. A fifth test was attempted near the swing set, at right, but the resisting soil proved to be a packed gravel surface, indicative of the former location of a driveway. The head of White Marsh is at bottom and North is at the top.

locations were identified beyond the old fence line, which appeared to be relatively undisturbed by agricultural activities.

The first line of tests was laid off between a swing set and a volleyball court, along which four test pits were sunk. A fifth test was attempted, but the effort was abandoned when it became evident that the landscaped part of the site has been heavily disturbed and rolled rock-hard.

The first test, between 10.5 and 11.5 meters from the corner of the volleyball court, revealed a topsoil buried under a recent fill layer that contains plastic trash. This was interpreted as an old ground surface on which landscapers for the apartment project had added a layer of fill. It was on the state property.

Layer of recent fill
10 yr 5/3 to 3/3
10 to 13 cm

A plowzone, sandy loam mottled with clods
7.5 yr 7/6
33 cm

Coarse sand with clay subsoil
7.5 yr 7/8 and 5/8

Figure 15: The first test, a meter square near the volleyball court, revealed considerable alteration of the surface.

The second test, a half-meter unit at 20 meters from the court, revealed an old feature, that evidently had existed before the apartment complex was built. The silt loam that overlay the old plowzone appeared to have been washed into a depression.

The third unit was a shovel test pit at 30.5 meters along the line. Again, the fill was evident. The top 11 centimeters was a silt loam with fine sand. Under this layer was a yellow sand layer 10 centimeters thick. Below this layer was a stratum of hard-packed black soil

that appeared to be oiled and full of trash, like a place where machinery has dripped oil persistently.

Test location four revealed a gravelly and trashy deposit at 40.5 meters from the volleyball court.

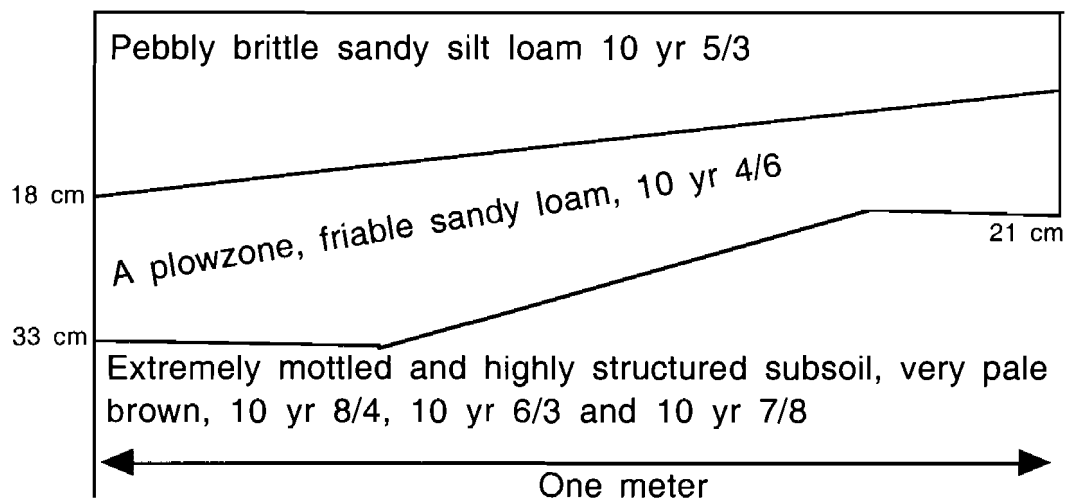


Figure 14: In the second test, 20 meters from the volleyball court, a graded feature was revealed, cutting into the subsoil.

After these five tests, it was apparent that there was no likelihood of finding an intact site on the flat landscaped area here, even though we had found a few chunks of rock that could have been fire-cracked or intentionally broken.

We then resolved to move into the woods, closer to the edges of the wetlands.

Before we could make this move, weather closed in. For a month, field work was suspended.

JANUARY IN THE WOODS

Just across the fence line from the modern apartment complex, the woodlands probably were never cultivated and not logged for generations, the site is covered by mature forest trees and very open understory.

Instead of testing only in the originally prescribed right-of-way, we chose to look at the project vicinity. We therefore located our tests according to the likely disposition of prehistoric cultural features. Test units were positioned on high ground likely to contain sites. We considered this broader survey area more prudent because there were still some unresolved questions that might cause changes in the alignment. This move was vindicated later, when a new alignment was taken into

consideration, west of the original one.

Sandy hills in the neighborhood have proved to contain deeply stratified archaeological deposits. The Simon's Savannah (Heite and Blume 1992: 42) and Blueberry Hill (Heite and Blume 1995) sites were excavated in connection with the Scarborough Road project over the years (Figure 17).

On January 13, we resumed work. The first step in this operation was to create a set of triangulation points to control testing in the woods (Figure 16). Lines between these points

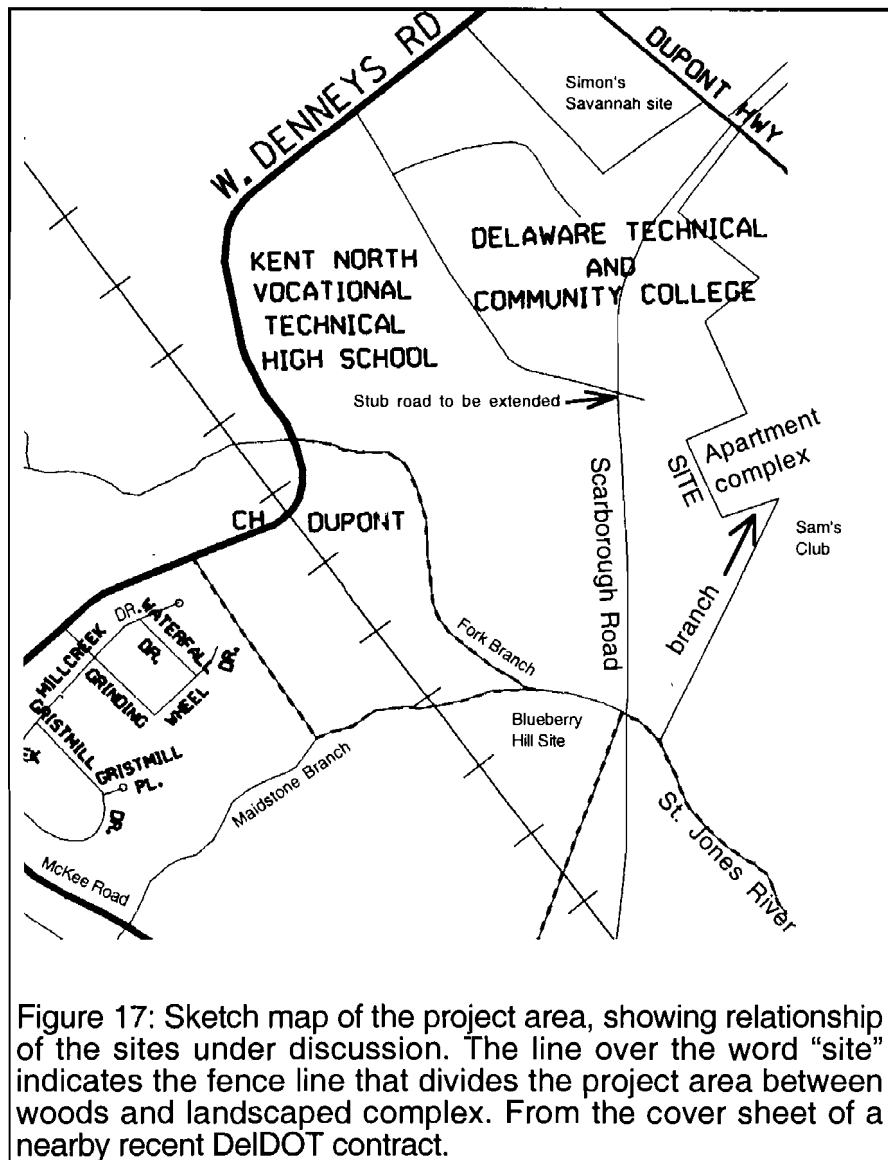


Figure 17: Sketch map of the project area, showing relationship of the sites under discussion. The line over the word "site" indicates the fence line that divides the project area between woods and landscaped complex. From the cover sheet of a nearby recent DelDOT contract.

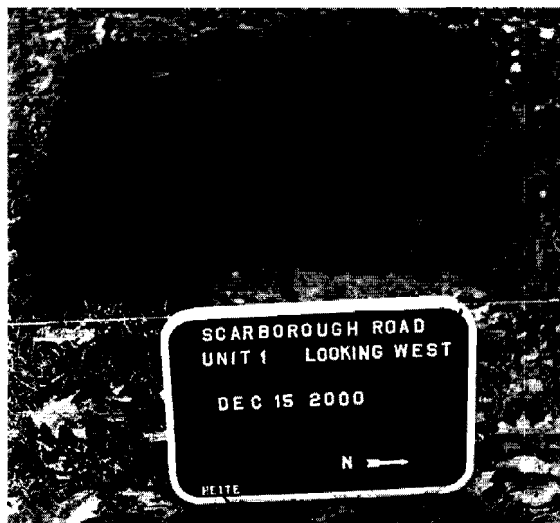


Figure 18: The first test pit, on the grassed surface near the volleyball court, yielded little material evidence of previous site occupants.

would be used to locate tests throughout any additional work.

There are many ways to lay out horizontal control points in an archaeological survey. Each investigator has a repertoire of favorite field control methods, which vary according to site conditions.

The most common survey layout planning techniques are the grid or the centerline interval survey. In flat, open ground, they are relatively easy and the most effective.

Under certain field circumstances, triangulation is preferable to the traditional rectilinear grid. To lay off a wooded site according to a rigid grid requires considerable survey work, to set arbitrary points that may fall at inconvenient locations. With triangulation, it is relatively easy to establish recoverable lines of sight through the woods at the crew's convenience.

At this site, the ground is broken, with relatively few areas evaluated as likely to contain cultural resources. Between the high and well drained sandy ridges are steep ravines and wetlands unlikely to contain sites. Triangulation allowed us to quickly establish lines in the likely areas.

A lattice of interconnected triangles was laid across the wooded part of the site, marked by points lettered from A through K. The web was anchored on fixed points known from the survey (Figure16):

	<i>From</i>	<i>To</i>	<i>Distance</i>
C, NW corner volleyball ct	D	D	19.5 m
	D	K	37.85 m
	K	J	54.3 m
	J	E	26 m
DelDOT survey point TP 4	K	E	55 m
	F	F	22.4 m
	F	J	36.8 m
	G	F	25 m
NE corner volleyball ct	G	G	17 m
NE corner volleyball ct	F	F	39.75
	F	E	15.3 m
SE corner unit 6 on line C-D	E	E	36.15 m
SW corner unit 9	H	H	21.10 m
	H	J	12.1 m
	E	H	15 m

The first line, C-D, followed the ridge of a spur of high ground 19.05 meters from the volleyball court into the woods. To the south of this ridge is White Marsh Branch. To the north is a small pit, probably a borrow pit, at the head of a drain.

Two units were opened along this line on January 13.

The first layer of Unit 6, at 13 meters along the line, was interpreted as possibly a former plowzone 20 centimeters thick. This contained three fire-cracked rocks. More fire-cracked rocks were found in the next ten centimeters, together with a quartz flake and a chunk of quartz.

At 18.3 meters from the volleyball court was Unit 7, with a former plowzone 28 centimeters thick. A jasper stemmed point and a fire-



Figure 19: Cara Blume discusses the pottery-rich unit 10 with visitors and workers during the January test campaign

cracked rock were found in this level. If this was a cultivated area at some time in the past, it could not have been very large, since it lies between White Marsh Branch and a gully. Cultural materials were found at the EB horizon, a half-meter down.

Units 8 and 9 were opened on a line northward from Unit 6, near point E, 35 and 21 meters away. These two tests encountered considerably more gravel, but only two jasper spalls.

Unit 10, only 11 meters from point E, contained a large amount of pottery. The twelve-centimeter loamy sand top layer overlay a sandy loam. The unit was excavated to 27 centimeters deep. A total of 49 sherds of

sand-tempered ceramic were recovered, mostly from the southwest quadrant, and mostly from between 12 and 22 centimeters.

Unit 11 was sited on the bluff overlooking White Marsh Branch, near point K, and 53 meters from point E. This unit contained artifacts from the top down to the last arbitrary level, 55 centimeters deep. One piece of prehistoric pottery was found in the twenty-centimeter topsoil.

From the six tests in the woods, we were able to identify at least three loci where prehistoric remains have survived, apparently with a very high level of integrity. The significance of these remains is obvious in terms of the

state management plan, which assigns a very high value to stratified and uncultivated sites.

Some, at least, of the prehistoric site clearly was within the originally planned right of way, but only more testing could define its actual extent.

We therefore proposed a Phase II exploration. "Phase II" in cultural resource terminology, refers to the process of determining "eligibility" for the National Register of Historic Places. The specifications for a Phase II study, therefore can be summarized as "whatever is necessary to determine eligibility." A typical Phase II project asks for the site's extent, expressed as boundaries, because the National Register requires project boundaries. The Register asks for evidence of "integrity," which involves such issues as the level of disturbance the site has suffered and the identification of activity areas. The third issue, significance, normally is expressed on archaeological sites in terms of criterion D, the site's ability to answer research questions.

Unit 10 had given us spectacular evidence for integrity in the form of a pot that had been dropped on the site surface about 2300 years ago, and had lain there relatively undisturbed, a clear



Figure 20: White Marsh Branch, viewed from the project work area

indication that the site had not been cultivated. Any unplowed prehistoric site is ranked very high on the significance scale because so many sites have suffered plow disturbance.

But the Phase I study had been only a starting point toward assessing eligibility. We would direct our efforts toward expanding upon what we already knew or suspected, concentrating on the area to be impacted by the proposed road. Some units in the Phase II study would be sunk to find the boundaries of the site, even if they happened to lie outside the immediate proposed right-of-way.